position that it would be obvious to modify the prior devices to include a heated discharge roller and one or more support rollers for discharging paper from a print head for drying ink and discharging the paper.

The alleged prior device described in the specification is relevant to the extent that a heated roller is positioned downstream of the print head. However, the heated roller is clearly separate from the discharge rollers that are positioned downstream of the heated roller. The heated roller as shown cannot function as a discharge roller. Thus, the prior devices described in the specification provide the upper and lower discharge rollers downstream of a heated roller such that only the discharge rollers contact the printer surface of the paper after the paper has been heated by the heating roller and after the ink has dried. As recognized in the Action, the device of Figures 1 and 2 of the specification do not disclose supporting rollers located above the discharge heating roller, a star wheel positioned above a heating roller or a rubber covering on the cylindrical portion of the discharge roller.

The prior device as described in the specification provides no suggestion of providing a supporting roll to cooperate with a heating roller where the supporting rolls contact the paper to discharge the paper. The description in the specification also fails to disclose or suggest a heat conductive cylindrical portion with a rubber covering over the cylindrical portion and a heat generator disposed on the inner surface of the cylindrical portion of the discharge/heater roller.

As noted in the Action, Muranaka discloses a printing apparatus having a pair of feed rollers upstream of the printing head as shown in Figure 1. The rollers of Muranaka are feed rollers. In one embodiment of Muranaka, the feed rollers can be heated to remove moisture from the paper prior to printing so that the static charge created on the sheet of paper by the rollers is uniformly distributed. Muranaka specifically discloses that the heating is for producing a uniform electrostatic charge and removing moisture prior to the printing step. In each of the embodiments of Muranaka, the feed rollers rub the surface of the paper to produce an

electrostatic charge having a predetermined value to assist in the printing step. As noted in the Action, Muranaka provides no suggestion of heating the paper downstream of the printing head or the combination of a supporting roller above a discharge heating roller.

Richtsmeier et al. does not disclose and provides no motivation or incentive to provide a star wheel positioned opposite a heated roller to dry the printing ink and simultaneously discharge the paper as in the present invention. Moreover, Richtsmeier et al. provides no motivation to modify the device of Figures 1 and 2 of the specification as suggested in the Action.

Claim 1 is specifically directed to an inkjet printer having a print head, a transfer unit for transferring paper towards the print head, a discharge and heating roller in contact with the side of the paper opposite the image formed by the print head for drying the ink and for discharging the paper, and one or more support rollers located above the discharge and heating roller for discharging paper together with the discharge and heating roller. Claim 1 further recites the discharge and heating roller comprising a heat conductive cylindrical portion, a rubber covering on the cylindrical portion for discharging of the paper, and a heat generator disposed on the inner surface of the cylindrical portion. The combination of these cited patents provide no motivation or incentive to produce the claimed inkjet printer or modify the prior devices. Furthermore, the combination of these features are not disclosed or suggested in the art of record. In particular, Richtsmeier et al. and Muranaka provide no motivation to one of ordinary skill in the art to modify the alleged admitted prior art.

As noted in the Action, the prior device described in the specification includes a single heated roller downstream of the print head for heating and drying the ink prior to contacting with the discharge rollers. The heated rollers of the prior device are separate and distinct from the discharge rollers and are positioned upstream of the discharge rollers a distance such that ink is dried before contacting the discharge rollers. The specification does not disclose the prior

apparatus having a support roller cooperating with the heated roller or the heated roller having a rubber covering for generating friction during the discharging of the paper as claimed. The heated roller of the prior device described in the specification does not assist in discharging the paper.

Muranaka provides no motivation or incentive to modify the prior devices to include a paper discharge assembly comprising a heated roller and a support roller as claimed for drying the ink and for discharging the paper from the print head. The assembly of the claimed invention includes a supporting roll located above the discharge and heating roller for discharging the paper while the discharge and heating roller dries the ink on the paper. Muranaka is specifically directed to heating the paper upstream of the print head to remove moisture and to provide a more uniform distribution of the static charge before feeding the paper to the print head. Once the paper is printed by the print head of Muranaka, there is no need to apply the electrostatic charge to the paper and thus no need to remove the moisture to assist in the uniform distribution of the electrostatic charge. Accordingly, Muranaka provides no motivation or incentive to heat the paper downstream of the print head. Moreover, Muranaka provides no motivation or incentive to modify the prior devices to provide a heating and discharge roller opposite the side of the image formed on the paper with one or more supporting rolls positioned above the discharge and heating roller for discharging paper from the print head.

The heating devices of the prior device described in the specification and the heating rollers of Muranaka are for unrelated purposes. Accordingly, one skilled in the art would not be motivated to modify the device described in the specification according to Muranaka as suggested in the Action. Furthermore, even if one were to modify the alleged prior device according to Muranaka, the result would be heated rollers upstream of the print head and a single heated roller downstream of the print head. Therefore, the resulting device would not be

the claimed invention recited in claim 1. In view of the deficiencies of the cited art, claim 1 would not have been obvious to one of ordinary skill in the art.

Claims 2-5 are allowable as depending from an allowable base claim and for reciting additional features of the invention that are not disclosed or suggested in the art of record. The cited art does not specifically disclose a discharge and heated roller close to the print head in combination with the supporting rolls for discharging the paper as in claim 2, an aluminum cylindrical portion for conducting heat as in claim 4, or the rubber formed on the surface of the roller being heat resistant as in claim 5 in combination with the features of claim 1.

Richtsmeier et al. appears to be cited for disclosing a star wheel for directing paper downstream of a print zone. However, the star wheel of Richtsmeier et al. is a spring loaded device that rides along the surface of the printed paper. The star wheel of Richtsmeier et al. is not a support roll located above a discharge and heating roller for discharging paper while the heating and discharge roller dry the ink as in the claimed invention. Therefore, Richtsmeier et al. provides no motivation or incentive to provide a star wheel located above the claimed discharge and heating roller. The star wheel of Richtsmeier et al. has no relation to the heating rollers of Muranaka. Since Muranaka provides the heating rollers upstream of the print head, it would not have been obvious to one of ordinary skill in the art to replace one of the heated rollers of Muranaka with the star wheel of Richtsmeier et al. and then position both the star wheel of Richtsmeier et al. and the roller of Muranaka downstream of the print head when neither suggests the downstream location. Accordingly, the combination of the alleged admitted prior art, Muranaka and Richtsmeier et al. fail to disclose or suggest the star wheel of claim 3 in combination with the inkjet printer of claim 1.

In view of the above, claims 1-5 are allowable over the art of record.

Rejection of Claims 7-11

Claims 7-11 are rejected under 35 U.S.C. § 103(a) as being obvious over the alleged admitted prior art in view of U.S. Patent No. 5,420,621 to Richtsmeier et al. and U.S. Patent No. 5,111,250 to Kashiwagi. Paragraph 2 on page 4 of the Action do not identify Muranaka as a reference in this rejection. Pages 4 and 5 of the Office Action discuss Muranaka which is not cited in the rejection in paragraph 2. Moreover, the rejection fails to discuss the relevance of the Richtsmeier et al. patent in this rejection or how Richtsmeier et al. is applied. Therefore, the Action clearly fails to establish *prima facie* obviousness in a manner that Applicants can respond.

Claim 7 is directed to a discharge and heating roller for use with an inkjet printer having a heat conductive central portion, a rubber covering on the cylindrical portion for generating friction and a heat generator disposed on an inner surface of the cylindrical portion in an axial direction. The cited art does not disclose or suggest the combination of these features. In particular, the alleged admitted prior art described in the specification does not disclose a structure for the heated roller. Thus, the specification disclosing the alleged admitted prior art does not disclose a heat conductive cylindrical portion with a rubber covering and a heat generator disposed on an inner surface of the cylindrical portion.

Richtsmeier et al. relates only to a star wheel and has no relation to claims 7-11 since the claims do not recite a star wheel. As noted above, Muranaka is directed to a heating device for heating the paper at a charge applying station. Muranaka provides no motivation or incentive to provide a discharge and heating roller for use with an inkjet printer as claimed. Kashiwagi is directed to a heat fixing device for a toner which can be heated by a nichrome wire. However, Kashiwagi fails to disclose a discharge and heating roller for use with an inkjet printer. Therefore, the combination of the cited art fails to disclose or suggest the combination of the claimed features. Thus, claim 7 is not obvious over the combination of the cited art. The

secondary references provide no motivation or incentive to one of ordinary skill in the art to modify the device of the alleged prior art as suggested in the Action.

The art of record also fails to disclose the discharge heater roller being disposed close to a print head as in claim 8, the cylindrical portion of the discharge and heating roller being aluminum as in claim 9, the rubber coating being formed of a heat resistant material as in claim 7, or the heat generator including a nichrome wire as in claim 11 either alone or in combination with the features of claim 7. Accordingly, claims 7-11 are not obvious over the combination of the cited art.

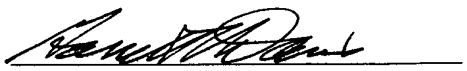
Rejection of Claim 6

Claim 6 is rejected under 35 U.S.C. § 103(a) as being obvious over the alleged admitted prior art in view of Muranaka and Richtsmeier et al. and further in view of Kashiwagi. Kashiwagi is cited for disclosing a heat generator formed from a nichrome wire.

As discussed above, Kashiwagi does not disclose or suggest a heating and discharge roller as in the claimed invention. Furthermore, the combination of the alleged admitted prior art, Muranaka and Richtsmeier et al. do not suggest the inkjet printer of claim 1. Therefore, Kashiwagi provides no motivation or incentive to one of ordinary skill in the art to modify the devices of the primary references in the manner suggested in the Action. Accordingly, claim 6 is not obvious over the combination of the cited art.

In view of the deficiencies of the cited art and the above comments, claims 1-11 are submitted to be in condition for allowance. Accordingly, reconsideration and allowance are requested.

Respectfully submitted,



Garrett V. Davis
Reg. No. 32,023

Roylance, Abrams, Berdo & Goodman, L.L.P.
1300 19th Street, N.W., Suite 600
Washington, D.C. 20036
(202) 659-9076

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